



International Civil Aviation Organization

NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE

Fifth Central Caribbean Working Group Meeting (C/CAR WG/5)

Mexico City, Mexico, 21 to 24 February 2005

C/CAR WG/5-WP/05

10/02/05

Agenda Item 3: Activities for the development of the air navigation systems/services
3.2 Air Traffic Management (ATM)

POST RVSM IMPLEMENTATION ACTIVITIES IN THE CENTRAL CARIBBEAN

(Presented by the Secretariat)

SUMMARY

This Working Paper presents the activities that should be held during 2005 after the RVSM implementation, so that the Central Caribbean States/Territories may plan the implementation of such activities.

References:

- Report of the First North American, Central American and Caribbean Directors of Civil Aviation Meeting (Grand Cayman, Cayman Islands, 8-11 October 2002)
- Report of the Seventh Meeting of Directors of Civil Aviation of the Central Caribbean (San Juan, Puerto Rico, 28 June-01 July 2004).
- Report of the Twelfth Meeting of GREPECAS (Havana, Cuba, 7-11 June 2004)
- Report of the Fourth Central Caribbean Working Group Meeting (Santo Domingo, Dominican Republic, 9-13 February 2004)

1. Introduction

1.1 The Twelfth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/12) agreed upon the implementation of RVSM in the CAR/SAM Regions, in accordance with the results of the implementation programme developed by the RVSM Task Force of the ATM Committee of the GREPECAS ATM/CNS Subgroup.

1.2 The Seventh Meeting of Directors of Civil Aviation of the Central Caribbean agreed to support the work of the C/CAR/WG for the successful implementation of RVSM in the Central Caribbean from FL 290 to FL 410 encompassing the different FIRs of the CAR and NAM Regions on 20 January 2005, in conjunction with the SAM and PAC Regions.

2. Analysis

Implementation of the Reduced Vertical Separation Minimum (RVSM)

2.1 In the framework of the implementation works, most of the States/Territories/International Organizations of the NAM and CAR Regions reported the finalization of the transition procedures as well as the different tasks related with their national programmes consisting of the regional planned process, such as supervising safety, publication of regulations and procedures, ATC training, development of handbooks and publications, etc. The ICAO NACC Regional Office monitored the transition and implementation procedures in the FIRs of the CAR and NAM Regions.

2.2 The RVSM Task Force, during the Ninth Meeting of ATM Authorities and Planners of the RLA/98/003 Project, carried out the final evaluation of safety prior to RVSM implementation. From the results obtained, that meeting recommended the implementation of some preventive measures so that ATS providers might reduce the risk level, which are contained in the **Appendix** to this Working Paper.

2.3 Considering that these are important measures that help to increase safety, it is required that the States/Territories of the Central Caribbean take the relevant actions allowing to improve the air traffic services quality. The measures adopted to prevent RVSM risk will be analysed together with the assessment of safety to be held 90 days after RVSM implementation and in a yearly basis.

RVSM Scrutiny Group

2.4 The RVSM Task Force agreed upon the regional creation of the RVSM Scrutiny Group of the CAR/SAM Regions composed by experts of different areas such as ATC, operation and aircraft maintenance, regulation and certification, data analysis and risk models.

2.5 The main objective of this Group will be to analyse and classify the impact of LHD (Large height deviation) for its use in risk assessment, as well as to recommend preventive actions required to ensure safety, together with the CARSAMMA (CAR/SAM Monitoring Agency) as set forth in ICAO Doc 9574.

2.6 Considering the importance of the works of this Group in the future, it is necessary that the States/Territories of the Central Caribbean update their RVSM programmes to support the activities of the RVSM Scrutiny Group.

3 Suggested Action

3.1 Taking into account the aforementioned, the Meeting is invited to consider the following post RVSM implementation activities in the Central Caribbean:

- a) presentation to the ICAO NACC Regional Office of the measures adopted for a RVSM risk prevention programme, based on the information of the Appendix to this Working Paper by 29 April 2005; and
- b) update of the national RVSM programmes in accordance with the recommendations that the RVSM Scrutiny Group of the CAR/SAM Regions will present.

APPENDIX

ATC RISK PREVENTION PROGRAMME

There are many initiatives that can be pursued to prevent operational errors from occurring. However, there are five primary areas, which can directly contribute to its prevention:

- **COMMUNICATIONS;**
- **PHRASEOLOGY;**
- **SUPERVISION;**
- **TEAMWORK; AND**
- **ATC PROFICIENCY.**

In an effort to accomplish the goal of reducing communication errors between adjacent ATC Units and thus reduce or minimize the occurrence of errors, the following objectives should be included in a national risk prevention programme:

The authority shall:

- a) identify individual, procedural, and/or equipment deficiencies used in air traffic services;
- b) promptly correct individual, procedural, and/or equipment deficiencies which affect coordinations with ACCs of adjacent States and national ATS units. This can be achieved through:
 - guidance on procedures to be followed;
 - implementation of read-back/hear-back programmes;
 - training in the filling of LHD forms;
 - increase and/or closer monitoring of ATCOs performance;
 - immediate coordination programme after a re-authorization or change in flight level;
 - changes in procedures and/or corrections/amendments of equipment;
- c) communicate performance expectations to ATS supervisors and controllers;
- d) ensure the ATS unit maintains a summary of and have information letters on operational errors, causal factors and trends, and incorporate them into training;
- e) monitor and evaluate voice recordings (all ATS operational personnel);
- f) take initiatives to improve communications among all ATS personnel to create an atmosphere conducive to sharing information;
- g) exercise strict safety oversight in ATC units;

h) ATS supervisors should:

- communicate performance expectations to controllers, stressing the importance of a professional operational control position performance, awareness, teamwork, the use of proper phraseology, proper coordination procedures, control position relief briefings and utilization of a position relief checklist;
- take prompt follow-up actions when controller performance does not meet expectations,
- inform on individual and team responsibilities, and the consequences for not meeting expectations;
- provide efficient and consistent oversight of the ATS unit operation, and use effective resource management to ensure proper and timely assignment of personnel to promote the safe, orderly, and expeditious handling of air traffic;
- ensure that distractions and noise levels in the ATS unit are kept at a minimum;
- require all personnel to maintain a high degree of professionalism, teamwork, control position performance, and awareness at all times in the ATS unit environment; and require that each controller knows, applies, and adheres to the appropriate requirements in the performance of his/her operational duties and responsibilities;
- promote an open flow of communications with all ATS personnel, allowing them to provide input to programme;
- place emphasis on hear-back/read-back errors during team meetings;

i) ATC personnel should:

- apply read-back/hear-back procedures when carrying out ATC coordination;
- keep ATS supervisors advised of traffic problems and equipment limitations;
- make suggestions for ATS unit improvements and/or prevention of operational errors;
- maintain situational awareness;
- extend the extra effort to assist busier control position(s);

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- continuously review their own operating techniques and ATS unit procedures to effect the highest quality of performance;
- promptly report all ATS incidents to the operational supervisor or other appropriate ATS authority for proper follow-up investigation;
- utilize memory aids.

VOICE RECORDING EVALUATIONS

Voice recording reviews should be conducted to ensure proper phraseology in accordance with the ICAO standards, and national directives and practices. Voice recording reviews should be conducted as follows:

- a) the ATS unit should ensure that voice recording reviews are conducted at least semi-annually on all ATS operational personnel;
- b) the ATS supervisor should review the voice recording, document comments and develop an action plan for documenting performance deficiencies; and
- c) the ATS supervisor and the controller should review and discuss the voice recording.

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